Application No.: 500.41280X00 Docket No.: 500.41280X00

REMARKS

Reconsideration and allowance of this application, as amended, is respectfully requested.

This Amendment is in response to the Office Action dated February 2, 2004, clarification of which was requested in a Request for Clarification of Office Action filed on March 5, 2004. Notwithstanding the confusion noted in the Request for Clarification of Office Action with regard to whether the Fukuda reference has been withdrawn or not, Applicants are filing the present response inasmuch as it is believed that the claims presented by virtue of this Amendment clearly define over all of the cited prior art in this case, including Fukuda, whether Fukuda is considered alone or in combination with the other cited prior art.

By the present Amendment, independent claims 1, 2 and 3 have been canceled, without prejudice to Applicants' right to present these claims in a Continuation application, for purposes of concentration of the present claims on particular features of the present invention which can be appreciated, for example, from Figs. 3 and 4 (noting that references to these figures is solely for the purposes of example). In particular, independent claims 4 and 5, as well as their dependent claims and the newly presented claims 24-48 (including new independent claim 27) all include the features of either an auxiliary electrode and/or a means for reducing resistance for a second transparent electrode in an organic light-emitting element. The means for reducing resistance is shown in Fig. 3, for example, as an auxiliary electrode 315 formed between a second transparent electrode 310 and a counter substrate 319. The auxiliary electrode and the second transparent electrode operate in conjunction with first electrodes 302, 302' (which can also be transparent

electrodes). The first electrodes 302, 302', the glass substrate 301, the organic light-emitting layers such as 305 and 306 and the second transparent electrode 310 are all part of an organic electroluminescent substrate 312. A counter substrate 319 is formed over the organic electroluminescent substrate 312, with the auxiliary electrode 315 being located within the light extraction layer 313 located between the organic electroluminescent substrate 312 and the counter substrate 319 (e.g. see page 28). Color filters 316 and 316' are provided on the counter substrate so that color light 322, 322' can be emitted from the counter substrate 319 (e.g. see page 29, line 19 et seq.). On the other hand, white light 321, 321' can be emitted from the second transparent electrode 310, as discussed on page 28, line 24 et seq. In addition, a rib 317 can be provided on the auxiliary electrode 315 in order to control the thickness of the light extraction layer 313.

Most importantly, in accordance with the present claimed invention, the auxiliary electrode 315 serves to substantially lower resistance of the device compared to the case of using only the second transparent electrode 310. This is set forth, for example, on page 30, lines 1-4 of the specification which states:

> "The provision of the auxiliary electrode 315 lowers the resistance to 1/1000 that of the construction having only the second transparent electrode 310, thus reducing power consumption."

As such, the incorporation of the auxiliary electrode 315 as a means for reducing the power consumption resistance for the second transparent electrode represents a significant feature of the present invention.

Reconsideration and allowance of independent claims 4 and 5 and new independent claim 27, together with their respective dependent claims, over the cited

prior art to Taniguchi (USP 4,954746), Nagayama (USP 5,742,129) and Fukuda (USP 6,541,130) set forth in the Office Action in rejecting independent claims 4 and 5, as well as the other cited prior art to Onitsuka (USP 6,049,167), Tang (USP 5,684,465) and Pichler (USP 5,929,562) cited against the dependent claims is respectfully requested.

As noted above, by the present Amendment, each of the independent claims 4, 5 and 27 defines either a "means for lowering resistance for the second transparent electrode" (claim 27) or an auxiliary electrode for the second transparent electrode (e.g. claims 4, 5 and dependent claim 28) provided between the organic electroluminescent substrate and the counter substrate. As such, an arrangement such as shown, for example, in claim 3 is clearly set forth in the present independent claims for providing either the means for lowering resistance or the auxiliary electrode between the organic electroluminescent substrate 312 and the counter substrate 319. It is respectfully submitted that there is no counterpart for any of the cited prior art, including the primary reference to Taniguchi used in rejecting both of the independent claims 4 and 5 in the Office Action.

More specifically, in the Office Action, it is stated that Taniguchi provides an auxiliary electrode 6. However, a close inspection of Taniguchi reveals that the electrode 6 shown in that structure is not an auxiliary electrode for a second transparent electrode. More specifically, in the Office Action, the upper electrode 16 for the lower substrate is identified as equivalent to the claimed "second transparent electrode." This second transparent electrode 16 operates as an upper electrode for a lower electrode 12 for an electroluminescent substrate, as properly recognized in the Office Action. However, the electrode 6 is, itself, also an upper electrode,

operating in conjunction with a lower electrode 2 for a substrate 1. As such, this upper electrode 6 is not an auxiliary electrode for the second transparent electrode electrode, as defined in independent claims 4 and 5 and dependent claim 28, since voltages directly applied between this upper electrode 6 and the lower electrode 2 in Taniguchi. This role of the electrode 6 as an upper electrode operating in conjunction with the lower electrode 2 can be appreciated, for example, from the discussion found beginning on column 3, lines 46 et seq. of the Taniguchi patent.

With regard to the present application, on the other hand, the independent claims 4 and 5 both clearly define:

"an auxiliary electrode for the second transparent electrode."

New independent claim 27 clearly defines:

"means for lowering resistance for the second transparent electrode."

In Taniguchi, as noted above, the upper electrode 6 is not provided to be an auxiliary electrode for the upper electrode 16. Quite to the contrary, the electrode 6 in Taniguchi is, itself, an upper electrode for a lower electrode 2. Therefore, the electrode 6 in Taniguchi does not qualify as either an auxiliary electrode for the second transparent electrode or as a means for reducing resistance for the second transparent electrode. Accordingly, reconsideration and allowance of the independent claims 4, 5 and 27, together with their dependent claims, is respectfully requested.

Regarding the dependent claims, it is respectfully submitted that these define very specific distinctions over the primary reference to Taniguchi, whether it is

considered alone or in combination with the various secondary reference cited therein. In particular, the dependent claims define specific structural features with regard to the use of the rib in conjunction with the auxiliary electrode (or means for reducing resistance) which are clearly not found in Taniguchi.

Beyond this, it is respectfully submitted that there is no motivation in any of the cited references for the complete modification of Taniguchi which would be necessary to arrive at the claimed invention. In the first place, as noted above, Taniguchi completely lacks any auxiliary electrode for the second transparent electrode, or any means for reducing resistance for the second transparent electrode. The only basis for modifying Taniguchi to arrive at such a structure in would be the Applicants' own disclosure, not anything found in the cited references. To arrive at the features set forth in the dependent claims, including the use of the rib (e.g. 317 in Fig. 3) for controlling the thickness of the light extraction layer (e.g. 313 in Fig. 3) and the detailed relationship between the auxiliary electrode and the second transparent electrode, the rib, and the counter substrate, would require a complete redesign of Taniguchi. As noted MPEP 2143.01 under the heading "The Prior Art Must Suggest the Desirability of the Claimed Invention":

> "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teachings, suggestion or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art."

In the present instance, it is respectfully submitted that there is nothing in Taniguchi or in the cited secondary reference which would motivate one to make the complete

modification of Taniguchi which would be necessary to meet the present claims. And, as set forth by the CAFC in the recent case In re Lee, 61 USPQ 2d 1430:

> "This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been lead to this combination of references, simply to "use that which the inventor taught against its teacher." 61 USPQ 2d at 1434

Accordingly, particular consideration of the dependent claims is also respectfully requested in this regard.

If the Examiner believes that there are any other points which may be clarified or otherwise disposed of either by telephone discussion or by personal interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus, LLP Deposit Account No. 01-2135 (Docket No.), and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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